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Copy 5 of 6

30 December 1958

MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report of Visit to Granger Associates

1. On 19 December 1958 a meeting was held in Palo Alto to discuss the Granger Repeater program. Attending were [redacted] and [redacted] of Granger, [redacted] of Edwards and Major [redacted] of R & D. The latest tests run at Point Mugu were reviewed and the results are encouraging. Detailed data reduction results were not immediately available but the interceptor pilot comments indicate that the Mod 504 is causing the radar to break lock at ranges greater than 3 miles and causes much of a confusion factor in the cockpit.

2. Based on the results of the last two tests, a six point program was discussed as the best way to proceed:

- a. Run a flight against the F-3H radar with the Granger box active at all times. This will determine if the box has a beacon effect on the search radar or if it helps prevent lock on.
- b. Run a flight at Point Mugu to confirm the results of the last flight.
- c. Use the Mod 504 against an F-102 at 20,000 feet.
- d. Use the Mod 504 against an F-106 at 20,000 feet.
- e. Test the Repeater in an altitude chamber to check for arc-over as the pressure is reduced. Shield and/or coat the necessary parts as determined by the testing to provide for 4.5 psi.
- f. Test the Mod 504 at operational altitudes by going ahead with Phase III and Phase IV of the proposed program.

25 YEAR RE-REVIEW

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3. Granger is not happy with the Higgins tube. They have looked into a 4 watt tube produced by Litton and would like to investigate the use of this higher powered tube. The Litton tube would be available by mid-February and could possibly be installed in the test aircraft by 1 March. Granger was asked to discuss this idea with Mr. [] for his coordination and recommendations to CHALICE Headquarters.

4. Granger also desires two major items of information. First, they desire the operational specifications of the Responder primarily in terms of altitude, maximum distance required to break lock, and minimum distance that is acceptable for the system to break lock. Secondly, they desire some action on the Litton tube investigation or the "stop order" on the Higgins tubes. They were told that the "stop order" must remain in effect until at least the results are seen of tests A, B and C of the program mentioned above in paragraph 2. No decision will be made on the Litton tube without advice from Mr. []

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[]
Major USAF

RDB:and (30 Dec 1958)

- 1 - SA/PD/DCI
- 2 - []
- 3 - Ops
- 4 - []
- 5 - Subject reply
- 6 - Chrono

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